TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

September 16, 2005

TO: Internal File

THRU: Peter H. Hess, Environmental Scientist III/Engineering, Team Lead

FROM: James D. Smith, Environmental Scientist III/Hydrology

RE: Incidental Boundary Change, Co-Op Mining Company, Bear Canyon Mine,

C/015/025, Task ID #2226

SUMMARY:

The Permittee has submitted an amendment to include all of federal lease U-38727 in the Bear Canyon Mine permit. The lease modification was approved by the BLM in 2003. The addition is 39.44 acres, the NE/4NE/4, section 24, T. 16 S., R. 7 E., and the permitted area expands from 3,336.18 acres to 3,375.62 acres. Estimates of in-place and recoverable coal reserves have been updated to match the latest R2P2.

Information in the amendment meets the requirements of the Geology and Hydrology sections of the R645 Rules and from that aspect approval of the proposed amendment is recommended.

There were no deficiencies identified in the previous Tech Memo for this amendment (Task #2042). This amendment does not require any changes in the geology and hydrology sections of the MTA or to the CHIA.

TECHNICAL ANALYSIS:

ENVIRONMENTAL RESOURCE INFORMATION

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783., et. al.

GEOLOGIC RESOURCE INFORMATION

Regulatory Reference: 30 CFR 784.22; R645-301-623, -301-724.

Analysis:

Tonnages in Table 3.4-1 on page 3-28 have been updated to match the most recent R2P2. Pete Hess worked with the Permittee to resolve some discrepancies in tonnage totals.

Findings:

Geologic resource information is sufficient to meet the requirements of the R645 Rules.

MAPS, PLANS, AND CROSS SECTIONS OF RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.24, 783.25; R645-301-323, -301-411, -301-521, -301-622, -301-722, -301-731.

Analysis:

Resource and Geologic Information Maps

Maps 6-1 through 6-12 have been updated to show the addition of the IBC to the permit area.

Monitoring and Sampling Location Maps

The permit boundary also needs to be updated on Plates 7-4, 7-10A, and 7N-2; however, because the entire permit is being updated and changed to digital format and the location of the IBC is not critical to the information on these maps, the updating of these three maps is not being required for approval of this amendment.

Findings:

Maps and plans of resource information are sufficient to meet the requirements of the R645 Rules.

CUMULATIVE HYDROLOGIC IMPACT ASSESSMENT

Regulatory Reference: 30 CFR Sec. 784.14; R645-301-730.

Analysis:

The IBC is within the current Gentry Mountain CHIA. The CHIA does not need to be updated.

Findings:

The current CHIA is sufficient to meet the requirements of the R645 Rules.

RECOMMENDATIONS:

The proposed amendment should be approved.